

ANNEXURE-1

LIST OF EQUIPMENT LOT-3

Sl. No.	Description	Quantity Nos	Recommended Make
1	Oil BDV test kit	1	BAUR/DELTATRONICS/MEGGER

ANNEXURE-6

1. TECHNICAL SPECIFICATION FOR OIL BDV TEST KIT

Sr. No	Specification	Yes/ No
1	The Instrument should be suitable for automatic measurement of Electrical Breakdown Strength of (breakdown voltage) of Insulating Oil as per relevant Standard	
2	The unit should be fully automatic, microprocessor controlled with built in colour display and printer & shall be complete with test cell stirrer and necessary gauges for adjusting the gap.	
3	The test cell shall be as per IS/IEC/ASTM suitable for BDV up to 100 kV without external flash over	
4	The unit shall be of composite type having control unit and high voltage transformer in a common cabinet with necessary partition. HV chamber interlocking and zero start interlocking shall be provided.	
5	The unit shall have motorized drive to increase voltage linearly as per the rate specified as per various testing standards namely IEC156, ASTM etc, Provision should also be available for Custom Test Setting.	
6	The unit shall be automatic and complete with test cell, stirrer and "GO" and "NO GO" gauge for adjusting the gap. Precision thumb wheel electrode gap adjustment facility with Electrode gap locking facility should be available	
7	The equipment shall have inbuilt temperature sensor to detect oil temperature automatically	
8	Parameters for test specification as defined by different standards like IEC156, ASTM should be pre-programmed in the instrument. The user needs to just select the standard used for test.	
9	Instrument should have alphanumeric keypad to facilitate entry of test ID notes etc.	
10	Breakdown detection should perform in terms of both "Voltage" and "Current.	
11	The HV switch off time shall be <10us automatically if an established arc of 4mA occurs for 5ms as per IEC156	
12	Instrument has built in printer, have inbuilt memory along with clock on unit and USB stick memory facility for easy transportation of results without a need to carry instrument near to computer	
13	Instrument should have spill oil drain facility in the instrument	
14	Kit should have facility for calibration by a proper external/individual	

	standard.		
15	Test Output Voltage	0-100kV (Rate of Rise 0.5 to 5kV/S	
16	Measurement Resolution	0.1kV or Better	
17	Measurement Accuracy	+/- 0.1kV	
18	Switch off Time	10 Micro Second	
19	Display/Control	LCD/Alphanumeric Keypad	
20	Printer	Both Inbuilt and External	
21	Safety	should comply relevant standards of IEC	